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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,721	06/28/2002	Kiyoshi Imai	M1401.0003/P003	2684

7590

11/13/2006

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EXAMINER

JOHNS, ANDREW W

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,721

Applicant(s)

IMAI ET AL.

Examiner

Andrew W. Johns

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 7 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 1.19(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 C.F.R. § 1.114

1. A request for continued examination under 37 C.F.R. § 1.114, including the fee set forth in 37 C.F.R. § 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 C.F.R. § 1.114, and the fee set forth in 37 C.F.R. § 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 C.F.R. § 1.114. Applicant's submission filed on 20 October 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 20 October 2006 have been fully considered but they are not persuasive.

Regarding claims 1 and 5, applicant argues that Tachikawa et al. fails to teach a storage portion that “does not include a non-volatile memory for storing said dictionary data” (last paragraph on page 6 of the response), and further describes the NVRAM of Tachikawa et al. as including both a volatile SRAM and a non-volatile EEPROM, so that the NVRAM of Tachikawa et al. stores the dictionary data even when the power to the system has been turned off (first paragraph on page 7 of the response). Applicant concludes by noting that the inclusion of the EEPROM in the Tachikawa et al. system is contrary to the purpose of applicant's invention (second paragraph on page 7 of the response).

The examiner agrees with applicant's characterization of the NVRAM of Tachikawa et al. and further agrees that it is contrary to the purpose of applicant's invention *as disclosed*. However, language of claims 1 and 5 still fails to distinguish the *claimed* invention from Tachikawa et al. Specifically, as the examiner attempted to clarify in the Final Rejection, mailed

20 June 2006, the claimed “storage portion” is not viewed as corresponding to the entire NVRAM of Tachikawa et al. Instead, the SRAM portion of the NVRAM of Tachikawa et al., by itself, corresponds to the claimed storage portion. In particular, the claim requires that the recognition process use “dictionary data stored in a storage portion”, as well as “means for writing said dictionary data into said storage portion” and that the storage portion is “erased at least at a time when the power is not on”. The SRAM portion of the NVRAM in Tachikawa et al. meets each of these requirements. The recognition processing uses the reference (i.e., dictionary) data from the VRAM (i.e., the volatile memory or SRAM) to discriminate paper money (column 10, lines 5-6); the data is written into the SRAM from the EEPROM at power-up (column 17, lines 27-29), and the SRAM utilized by Tachikawa et al. is inherently erased when the power is off. Furthermore, the VRAM or SRAM is, by definition, not a non-volatile memory, and this portion, which is the only part of Tachikawa et al. that is utilized by the recognition process, does not include a non-volatile memory. The language of the claim only requires that the storage portion, which is defined by the claim language as the portion storing the dictionary data *used by the recognition process*, not include a non-volatile memory. Since only the VRAM is accessed by the recognition process, the VRAM of Tachikawa et al. corresponds to the claimed storage portion. The claim language does not preclude the possibility that the claimed image recognition apparatus can include a non-volatile memory that is coupled to the storage portion, as disclosed by Tachikawa et al., so that Tachikawa et al. continues to anticipate applicant’s invention, as claimed.

3. Applicant’s arguments, see pages 7-9 of the response, filed 20 October 2006, with respect to the rejection of claims 3 and 7 as anticipated by Tachikawa et al. have been fully considered and are persuasive. The rejection of claims 3 and 7 has been withdrawn.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4/1, 4/2 and 5-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Tachikawa et al. (US 5,652,803 A).

Tachikawa et al. teaches an image processing apparatus comprising an image recognition apparatus for preventing counterfeiting of bank notes and valuable securities (Tachikawa et al. is directed towards preventing the counterfeiting of bank notes and valuable securities, as described in the Abstract, for example), comprising a recognition processing portion (104 in Figure 1) which carries out a recognition process on supplied image data using dictionary data stored in a storage portion (column 10, lines 5-6) to determine whether or not said supplied image matches said dictionary data (column 8, lines 43-54); and means for writing said dictionary data into said storage portion (column 17, lines 27-29; the dictionary data is written into SRAM in response to a recall command when the power is turned on); wherein said dictionary data stored in said storage portion is erased at least at the time when the power is not on (the dictionary data stored in the SRAM is automatically erased when no power is supplied to the SRAM; while Tachikawa et al. fails to specifically describe this feature of the SRAM, it is an inherent function of SRAM, as described in the appropriate entries in the third edition of the Microsoft Press Computer Dictionary), and said storage portion does not include a non-volatile memory for storing said dictionary data (i.e., the VRAM that is utilized by the recognition processing, is by definition a

volatile memory and thus does not include a non-volatile memory; the claim language fails to preclude the possibility that the apparatus might include a non-volatile memory that is coupled to the storage portion; only the VRAM of Tachikawa et al. corresponds to the claimed storage portion, as discussed more fully above), as variously stipulated by claims 1 and 5. Furthermore, Tachikawa et al. also teaches means for performing a copy-prohibiting process when a determination of a copy-prohibited object is made based on an output from said image recognition apparatus (column 16, lines 13-32; the image forming operation is interrupted, as shown at the bottom of the column for the main CPU in Figure 14B), as further required by claim 5. In addition, Tachikawa et al. further teaches that said storage portion is constructed from a volatile memory (i.e., the SRAM which is a volatile memory that only stores data while adequate power is supplied to it), and wherein the erasing of said dictionary data is carried out automatically in accordance with the cutting off of the power supply (as noted before, the SRAM only stores data while appropriate power is supplied to it, so that it inherently erases any stored data when the power is removed), as further required by claims 2 and 6. Finally, Tachikawa et al. additionally teaches means for monitoring the connection status of storage portions (column 9, lines 3-5) as variously required by claims 4/1 and 4/2.

Allowable Subject Matter

6. Claims 3, 4/3 and 7 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: While Mennie et al. (US 6,256,407 B1) does teach deleting dictionary data from a memory, Mennie et al. fails to teach or suggest that such a deletion occurs in response to a termination signal, as now required by claims 3 and 7.

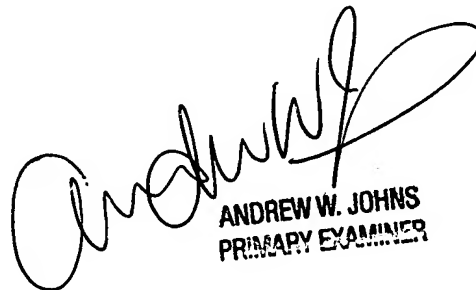
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Johns whose telephone number is (571) 272-7391. The examiner is normally available Monday through Friday, at least during the hours of 9:00 am to 3:00 pm Eastern Time. The examiner may also be contacted by e-mail using the address: andrew.johns@uspto.gov. (Applicant is reminded of the Office policy regarding e-mail communications. See M.P.E.P. § 502.03)

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Matt Bella, can be reached at (571) 272-7778. The fax phone number for this art unit is (571) 273-8300. In order to ensure prompt delivery to the examiner, all unofficial communications should be clearly labeled as "Draft" or "Unofficial."

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Receptionist whose telephone number is (571) 272-2600.

A. Johns
8 November 2006



ANDREW W. JOHNS
PRIMARY EXAMINER